Claims

What is claimed is:

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A search engine system, comprising:

an associative membry;

a first search engine having a first data input and a connection to the associative memory; and

a second search engine having a second data input and a connection to the associative memory.

- 2. The search engine system of claim 1, further including a pre-parser having an input connected to the first data input and an output connected to an input of the first search engine.
- The search engine system of claim 1, further including a 3. hit output queue connected to the first search engine.
- 4. The search engine system of claim 3, further including a proximity search engine connected to an output of the first search engine.
- 5. The search engine system of claim 4, further including a key list connected to the proximity search engine.

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- 6. The search engine system of claim 5, further including a proximity hit queue connected to the proximity search engine.
- 7. The search engine system of claim 1, wherein the first search engine includes a transform generator.
- 8. The search engine system of claim 7, wherein the transform generator converts an input data into an address and a confirmer.
- 9. The search engine system of claim 5, wherein the key list contains at least two text strings and a distance between the at least two text strings.
- 10. The search engine system of claim 1, further including a packet input queue connected to the associative memory.

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- 11. A method of operating a search engine system, comprising the steps of:
 - a) forming a packet of data;
- b) when the packet of data contains a start flag, starting a sliding window search on the packet of data,
 - c) when a match is found, determining a location of the match.
- 12. The method of claim 11, wherein step (a) further includes the step of:
- a1) parsing a raw data to find a predetermined set of characters;
- a2) when the predetermined set of characters is found, replacing the predetermined set of characters with a replacement set characters.
- 13. The method of claim 12, wherein step (a1) further includes the steps of:

i) defining the predetermined set of characters to be any combination of white space characters;

ii) defining the replacement set of characters as a space character.

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- 14. The method of claim 12, wherein step (a1) further includes the steps of:
- i) defining the predetermined set of characters to be all capital letter;
- ii) defining the replacement set of characters as a corresponding lower case letter.
 - 15. The method of claim 11, further/including the steps of:
 - d) determining if the match is contained in a proximity key list;
- e) when the match is contained in a proximity key list, determining if the match is a primary index;
- f) when the match is a primary index, storing the match in the proximity hit queue.
 - 16. The method of claim 15, further including the step of:
- f) when the match is a next index, searching the proximity hit queue for an associated primary index.

- 17. The method of claim 16, further including the steps of:
- g) determining if a first entry is the associated primary index;
- h) when the first entry is the associated primary index, determining a distance between the next index and the primary index;
- i) when the distance between the next index and the primary index is less than a proximity offset storing a proximity hit in the final proximity hit queue.
 - 18. The method of plaim 16, further including the steps of:
- j) when the distance between the next index and the primary index is not less than the proximity offset, flushing the primary index from the proximity hit queue.

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- 19. The method of claim 11, wherein step (a) further includes the steps of:
 - al) receiving an input data stream;
- a2) removing an overhead data to form a raw data stream;
 - a3) determining a start of a message;
- a4) forming a search packet containing a start flag and a portion of the raw data;
- a5) forming a plurality of search packets containing only the raw data;
 - a6) determining an end of the message;
- a7) when an end of message is found, forming a final search packet containing an end flag.
 - 20. A search engine system comprising:
 - an associative match memory;
- a sliding search engine connected to the associative match memory; and
- a proximity search engine connected to an output of the sliding search engine.

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- 21. The search engine system of claim 20, further including a plurality of sliding search engines that are each connected to a separate data stream.
- 22. The search engine system of claim 20, further including a plurality of proximity engines are connected the sliding search engine.
- 23. The search engine system of claim 20, further including a pre-parser connected to one of the sliding search engine.
- 24. The search engine system of claim 23, wherein each of the plurality of pre-parsers contains a mapping table.
- 25. The search engine system of claim 24, wherein an entry in the mapping table contains a characters to be replaced location and a replacement characters location.
- 26. The search engine system of claim 20, further including a plurality of proximity search engines connected to the sliding search engine.
- 27. The search engine system of claim 26, further including a key list memory connected to the proximity search engine.

- 28. The search engine system of claim 27 wherein the key list contains a plurality of locations, at least one of the plurality of locations contains a primary index, a next index and a proximity offset.
- 29. The search engine system of claim 27, wherein the proximity search engine contains a proximity hit list.
- 30. The search engine system of claim 21, further including a data input processor.